

James Brown

From: Joe Kalmar [JKalmar@landauinc.com]
Sent: Monday, January 18, 2010 4:53 PM
To: Jerry Thompson; James Brown
Subject: Wastewater Permit and Flow-Proportional Sampling

Jerry and Jim,

Sorry for all the emails from me today, but another thing that I wanted to follow up with you on was the issue of the new requirement in your wastewater discharge permit to evaluate and possibly implement flow-proportional sampling. As I mentioned to Jerry early last week, I attend the Puget Sound Shipbuilders meeting on Friday and Peggy Rice from King County Industrial Waste was there to discuss this issue of flow-proportional sampling that is now in all of their reissued permits.

Peggy explained that this is an EPA requirement that King County is just now getting incorporated into their permit. I estimate that to purchase an ISCO composite sampler and to set it up to collect flow-proportionate composite samples would probably cost in the neighborhood of \$10,000. I asked Peggy if there were specific methods that could be used to evaluate or demonstrate that time-proportional sampling would be adequate (I have some ideas on how to do that). However, Peggy said that no evaluation methods or demonstrations have yet been approved by KCIW, and it is another engineer at KCIW (not Peggy) that evaluates requests on a case-by-case basis.

If you are interested in having Landau write up a suggested approach to demonstrate that, let me know and I can follow up with you in more detail.

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MONTHLY INSPECTION FORM
ALASKAN COPPER WORKS, SEATTLE, WASHINGTON

Quarter: _____ Date: _____ Time: _____ Weather Conditions: _____

MONTHLY INSPECTION [In accordance with Permit Condition S7, qualified personnel shall conduct and document visual inspections of the site each month. Each inspection shall include: observations made at stormwater sampling locations and areas where stormwater associated with industrial activity is discharged off site; or discharged to waters of the state, or to a storm sewer system that drains to waters of the state. Record the results of each inspection on this form and keep the form on site for Ecology review.]

If conducted during a storm event, inspect stormwater discharge for evidence of pollutants entering the drainage system. Check for oil sheen, floating debris, discoloration, turbidity, and odor. Record observations here:

(Inspection locations: CB331707, CB330001, CB330102, and CB SW of Bldg 2958)

Or, if conducted during a non-storm event, check for the presence of illicit discharges such as domestic wastewater, noncontact cooling water, or process wastewater. Groundwater is not considered an illicit discharge. If an illicit discharge is discovered, the Permittee shall notify Ecology within seven days and eliminate the illicit discharge within 30 days. Record observations here:

Assess all BMPs that have been implemented paying special attention to the following (check BMPs inspected):

- ☐ Catch basin insert filters inspected and cleaned or replaced as necessary.
- ☐ Liquids stored outdoors are covered or have secondary containment.
- ☐ Covers placed over waste dumpsters and storage containers.
- ☐ Paved areas swept clean.
- ☐ Vehicles and Equipment (no major leaks). ☐ Other BMPs observed? List here:

1. Do the BMPs listed above appear to be effective and functioning adequately and with no observable deviations from the BMP descriptions as described in the SWPPP (Yes / No)?
2. Do the site conditions including potential pollutant sources appear to be consistent with the facility assessment and site map contained in the SWPPP (Yes / No)?

[If the answer to questions 1 or 2 were no, explain here. Include, if applicable, the locations of BMPs that need maintenance, the reason maintenance is needed and a schedule for maintenance, as well as the locations where additional or different BMPs are needed and the rationale for the additional or different BMPs.]

COMPLIANCE STATEMENT: In the judgment of the person identified below as Inspector, the Alaskan Copper Facility is in ☐ **COMPLIANCE** OR ☐ **NON-COMPLIANCE*** (check one) with the terms and conditions of the SWPPP and the Permit. In the judgment of the person identified below as Facility Representative, the Facility is in ☐ **COMPLIANCE** OR ☐ **NON-COMPLIANCE*** (check one) with the terms & conditions of the SWPPP and the Permit. *If non-compliance, the Permittee shall prepare reports of non-compliance in accordance with the requirements of Condition S9.E of the Permit; and in addition, include as part of this inspection, a summary report and a schedule of implementation of the remedial actions that the Permittee plans to take if the site inspection indicates that the site is out of compliance. The remedial actions taken must meet the requirements of the SWPPP and the permit.

CERTIFICATION: I certify that this report is true, accurate, and complete, to the best of my knowledge and belief.

Name of inspector (1): _____ Title _____

Signature of inspector (1): _____ Date _____

Name of Facility Representative (2): _____ Title _____

Signature of Facility Representative (2): _____ Date _____

(1): As acknowledged by Ecology's Detailed Response to Comments Fact Sheet, APPENDIX C Addendum Part TWO, the certification and signature of the site inspector "may be limited by several factors including incomplete information (e.g., DMR compliance, etc...)". Therefore, by implication, certification and signature by the site inspector does not guarantee site compliance, nor does it imply site inspector liability if non compliance is later determined for the site.

(2) In lieu of Certification and signature of the person described in Condition G2.A of the Permit, a duly authorized representative of the facility, in accordance with Condition G.2.B, may also certify and sign this inspection form.

**QUARTERLY STORMWATER SAMPLING
ALASKAN COPPER WORKS, SEATTLE, WASHINGTON**

Quarter: _____ Date: _____ Sampling Locations: <u>CB331707 and CB330001</u>	
STORMWATER SAMPLING: According to the Industrial Stormwater General Permit condition S4.B, a permittee is required to collect a sample within the first 12 hours of stormwater discharge. Fourth quarter sampling must occur during the first storm event of that quarter. For the other three quarters, sampling does not need to be conducted during the first storm event. Permittees need not sample outside of regular business hours, during unsafe conditions, or during quarters where there is no discharge, but must still submit a Discharge Monitoring Report each reporting period.	
1. Time of sampling (should be within 12 hours after discharge begins):	<u>CB331707:</u> _____ <u>CB330001:</u> _____
2. Did sampling occur within the first 12 hours of discharge?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. If the answer to question 2 is no, explain why a sample was not collected within the first 12 hours.	
4. For fourth quarter sampling, did the sampling occur during the first storm event of that quarter?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
5. Sampling method (e.g., "from catch basin by hand"):	_____
6. Sampling parameters: turbidity, pH, total copper, total zinc, total lead, total petroleum hydrocarbons, TSS	
7. Oil Sheen Present?	<u>CB331707:</u> <input type="checkbox"/> Yes <input type="checkbox"/> No <u>CB330001:</u> <input type="checkbox"/> Yes <input type="checkbox"/> No
8. Result of field measurements (pH/Turbidity):	<u>CB331707:</u> _____ <u>CB330001:</u> _____
9. Comments (i.e., unusual circumstances):	
Name of sampler: _____	
Signature of sampler: _____ Date: _____	
VISUAL MONITORING REMINDER [If monthly visual monitoring has not already been conducted, record the results of visual monitoring on the separate required Monthly Inspection form].	

**Industrial Stormwater General Permit National Pollutant Discharge Elimination System (NPDES)
Discharge Monitoring Report (DMR)**

ADDITIONAL SAMPLING LOG

If you collect more than one sample per quarter, report the results in the table below. Include the date the sample was collected, and the results of the analysis. Calculate the average (mean) for each parameter (except pH and oil sheen) and report the value in the AVERAGE column on the front page. Attach additional sheets if necessary.

Site Name: ALASKAN COPPER		WAR000139	
Site Address: 3200 6th Avenue South			Sampling Point
City: Seattle	County: King		

Sample date (MM/DD/YYYY)	Turbidity (NTU)	pH (s.u.)	Zinc, Total (µg/L)	Oil Sheen Present? (circle one)	Copper, Total (µg/L)	Lead, Total (µg/L)	Total Petroleum Hydrocarbons (TPH)

Mail your DMR to: Department of Ecology, Water Quality Program – Industrial Stormwater, P.O. Box 47696, Olympia, WA 98504-7696

Industrial Stormwater General Permit National Pollutant Discharge Elimination System (NPDES)

Discharge Monitoring Report (DMR)

Site Name: ALASKAN COPPER WORKS		WAR000139	
Site Address: 3200 6th Avenue South			Sampling Point
City: Seattle	County: King		

Submit **one** DMR per sampling point.

Reporting Period			
Quarter (circle one) Year:			
1 st	2 nd	3 rd	4 th
Jan/Feb/Mar	Apr/May/Jun	Jul/Aug/Sept	Oct/Nov/Dec

Parameter	Units	Benchmark Value (Effluent Limit)*	Analytical Method	Laboratory Quantitation Level	Sample Results			
					SINGLE SAMPLE RESULT	SINGLE SAMPLE DATE (MM/DD)	AVERAGE <small>(If more than one sample collected, complete additional sampling log on next page.)</small>	CONSISTENT ATTAINMENT? <small>(Condition S4.B.6) (✓ for yes)</small>
Turbidity	NTU	25	EPA 180.1, Meter	0.5				<input type="checkbox"/>
pH	s.u.	5 - 9	Meter	±0.5			N/A	<input type="checkbox"/>
Zinc, Total	µg/L	117	EPA 200.8	2.5				<input type="checkbox"/>
Oil Sheen	Yes/No	No visible oil sheen	N/A	N/A	Sheen Present? Yes / No (circle)		N/A	N/A
Copper, Total	µg/L	Western WA: 14 Eastern WA: 32	EPA 200.8	2.0				<input type="checkbox"/>
Lead, Total	µg/L	81.6	EPA 200.8	0.5				<input type="checkbox"/>
Total Petroleum Hydrocarbons (TPH)	mg/L	10	NWTPH-Dx	0.1				<input type="checkbox"/>
TSS*	mg/L	(30)*	SM2540-D	5			N/A	N/A

☐ No sample collected – No stormwater was discharged during normal working hours.

☐ No sample collected – Stormwater was discharged during normal working hours, but a sample wasn't collected (explain in comments section).

*TSS is included per condition S6 of Permit because this facility discharges to a water body 303(d) listed for sediment. The effluent limit of 30 mg/L is for both marine and fresh water.

ADDITIONAL COMMENTS:

Certification Statement I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ Name / Title (printed)	_____ Signature (not valid unless signed). See Permit Condition G2 for signature requirements.	_____ Date Signed
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Mail your DMR to: Department of Ecology, Water Quality Program – Industrial Stormwater, P.O. Box 47696, Olympia, WA 98504-7696

Forms and Recordkeeping (DMR, Monthly Inspection, Quarterly Sampling)

Employee Training		Worksheet #4	
Describe the annual training of employees on the SWPPP, addressing spill response, good housekeeping, and material management practices.			
Training Topics	Brief Description of Training Program/Materials (for example: film, newsletter, class)	Schedule for Training	Attendees (sign and date on reverse side)
1) Line Workers			
Spill Prevention and Response	Written training program based on Ecology Stormwater Program Guidelines Standard ER Response Procedures (1910.120)	July 31	Spill Prevention Team Members and Department Managers
Good Housekeeping	Internal policy and BMP review indicated in the SWPPP	July 31	Department Managers and Employees
Material Management Practices	Internal policy and BMP review indicated in the SWPPP	July 31	Department Managers
2) Pollution Prevention Team			
SWPPP Implementation	Internal policy and BMP review indicated in the SWPPP	July 31	Spill Prevention Team Members and Department Managers
Monitoring Procedures	Internal policy and BMP review indicated in the SWPPP	July 31	Spill Prevention Team Members

List of Significant Spills and Leaks						Worksheet #3		
List all spills and leaks of toxic or hazardous pollutants that were significant. Significant spills and leaks include but are <u>not</u> limited to, release of <u>oil</u> or <u>hazardous</u> substances in excess of reportable quantities. Although not required, it is recommended to list spills and leaks of non-hazardous materials.								
Date and Time (month/day/year)	Location (refer to site map)	Description				Response Procedure		Preventive Measure Taken
		Type of Material	Quantity	Source (if known)	Reason for Spill/Leak	Amount of Material Recovered	Material No Longer Exposed to Stormwater (Yes/No)	

Potential Pollutant Source Identification		Worksheet #2
List all potential stormwater pollutants from on site activities, including stored materials.		
Stormwater Pollutant Source	Potential Stormwater Pollutant	Likelihood of Pollutant Being Present in Stormwater Discharge
Plasma Table and Cutting Operations	Copper	Potential due to vaporization of metals during high temperature cutting
Outdoor Stored Raw and Final Products	Copper, Zinc, Cutting Fluids, and Oils	Likely due to exposure to rain or moisture
General Truck and Forklift Operations	Oils and Grease, Copper	Likely minor source due to drips of fuel or lubrication oil from forklifts or material supplier trucks and vehicles, and copper from brake pads
Metal Cutting Work Stations	Cooling Fluids	Unlikely due to process containment but potential for coolant line rupture or failure
Building and Structures	Zinc and Copper	Likely due to leaching from materials of construction
Dust and Particle Emissions	Copper, Turbidity	Possible due to vaporization of metals and air movement during high temperature cutting. Also possible from other facility operations and material handling and transport.

Identify Areas Associated with Industrial Activity		Worksheet #1
<p>Edit these areas to only include those occurring at the facility or add additional areas which may be sources of pollution. Discuss the potential of these areas and activities as potential pollutant sources and identify any pollutant that may be generated by that activity.</p>		
Industrial Area or Activity	Potential Stormwater Pollutant from Area or Activity	Likelihood of Being Present in Stormwater Discharge and Source of Potential Contamination
Plasma Table Operations	Copper, Oil and Grease, Turbidity	Leakage of process water or fluids and setting stock or unfinished product on non-contained surfaces could possibly result in runoff/ into the storm drain. However, this operation is conducted indoors and drainage to the storm drain is deemed very unlikely. Potential for vaporization of metals during high temperature cutting.
Raw product and materials in outdoor storage areas	Copper, Zinc, Oil and Grease, Turbidity	Outdoor areas of raw material and finished product storage are potential sources of pollutants to stormwater. However, much of the finished product is stainless steel, which is not expected to leach copper or zinc to stormwater.
Truck and forklift transport of materials	Copper, Zinc, Oil and Grease, Turbidity	Vehicle traffic can track dirt and particulates around the facility. Wear from brake pads is a known source of copper.
Generated dust or particulates	Copper, Turbidity	Uncontrolled migration of particulates and dust from plasma table and cutting operations could result in impact to stormwater.
Roofs or other surfaces exposed to vented air emissions from processing	Copper	Deposition of particulates onto air emission contaminants may likely result in runoff/seepage into stormwater system.
Vehicle fueling, maintenance and/or cleaning	Oil and Grease	Only minor amounts of fueling are performed on site at the diesel storage tank. The majority of fueling is performed off site. Maintenance or cleaning of vehicles is generally not performed on site, and in the unexpected event that it would need to be conducted on site it would be performed only if the nearby storm drains are plugged and any generated wash water or vehicle fluids are collected and taken for proper treatment/disposal.
Building walls, roofs, or other surfaces, both painted and unpainted, that contain metals	Zinc and Copper	Roofing and building construction materials having corrosion protective coatings (including galvanized materials) or painted surfaces may likely result in leaching of zinc or copper into stormwater.